



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/527,534

03/11/2005

Naoyuki Suzuki

05113/HG

9534

1933 7590 02/22/2008

FRISHAUF, HOLTZ, GOODMAN & CHICK, PC  
220 Fifth Avenue  
16TH Floor  
NEW YORK, NY 10001-7708

EXAMINER

CHANG, VICTOR S

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

02/22/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/527,534	<b>Applicant(s)</b> SUZUKI ET AL.	
	<b>Examiner</b> Victor S. Chang	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-27 is/are pending in the application.
- 4a) Of the above claim(s) 8,10,12,13,15,17-19,25 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9,11,14,16,20-24 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/11/05, 6/13/05, 2/5/08</u> .                                | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Species A(b) of a foamed floor tile, and Species B of a plastisol of a copolymer of vinyl chloride and vinyl acetate in the reply filed on 1/29/2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 9, 11, 14, 16, 20-24 and 26 are elected. Claims 8, 10, 12, 13, 15, 17-19, 25 and 27 are withdrawn.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9, 11, 14, 16, 20-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art in view of Wisotzky et al. [US 3560284] and JP 49-052860.

Applicants admitted in the Background Art Section that a conventional loose-lay floor tile has a nonskid mechanically foamed material formed from acrylic emulsion [specification, pp. 1].

For claims 9, 11, 14, 16, 20 and 22, the admitted prior art lacks a disclosure that the nonskid foamed material is a solidified a plastisol of a copolymer of vinyl chloride and vinyl

Art Unit: 1794

acetate, a plasticizer, and a silicone surfactant (hydrophobic foam stabilizer). However, Wisotzky's invention relates to a foam backed carpet. The foam backing provides cushioning and non-skid effects. Known foam backing of a by aeration, gelling and curing a latex composition (emulsion) suffers various deficiencies, e.g., poor strength, delamination, etc. [col. 1, ll. 42-59]. An improved foam backing is formed by fusing a coating of a heat sensitive plastisol in an oven, forming a closed-cell foam layer, followed by embossing to form a skid resistant pattern (e.g., waffle-like) on the outer surface of the foam [col. 3, ll. 34-47; col. 5, ll. 75]. The plastisol comprises a vinyl chloride based polymer, preferably a vinyl chloride/vinyl acetate copolymer, wherein the vinyl acetate component of the copolymer is in the range of 5 to 15% by weight. Conventional plasticizers such as dioethyl phthalate (phthalic acid based plasticizer) are employed. Plasticizers are employed at a level of 60 to 120 parts of plasticizer per 100 parts of resin on a weight basis [col. 3, ll. 66 through col. 4, ll. 2]. It would have been obvious to one of ordinary skill in the art to modify the non-skid backing of the admitted known loose-lay tile with the foamed plastisol of Wisotzky, motivated by the desire to obtain an improved durable backing material. Regarding the silicone surfactant, JP '860 relates to a fused foam formed from a mechanically foamed PVC based plastisol, and teaches that the plastisol mixture comprises a silicone surfactant. It would have been obvious to one of ordinary skill in the art to modify the plastisol mixture of Wisotzky with a silicone surfactant taught by JP '860, motivated by the desire to obtain the beneficial effect of the silicone surfactant. Further, the examiner takes Official notice that it is commonly knowledge that a silicone surfactant stabilizes a foamed structure.

Art Unit: 1794

For claims 21, 23, the examiner take Official notice that di-2-ethylhexyl phthalate and diisononyl phthalate are known functionally equivalent phthalic acid based plasticizers for forming plastisols of vinyl chloride based polymers, and selecting a known equivalent material is a *prima facie* obviousness determination.

For claim 24, since the combined teachings of prior art render the general structure and composition obvious, and for the same end use as the claimed invention, a workable foam expansion ratio is deemed to be an obvious optimization to one of ordinary skill in the art, dictated by the same required foam properties for the same use.

For claim 26, Wisotzky's teaches that the foam material is embossed to form a skid resistant pattern, such as a waffle-like pattern, which comprises crossed stripes.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 7:00 am - 5:00 pm, Tuesday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor S Chang/  
Primary Examiner, Art Unit 1794